

Obituary: F G W Jones MA, ScD, CBiol, FIBiol

1914 – 2003

Frederick George William Jones (Fred) was born 'upstairs in the front room' on November 15th 1914 in Cannock, Staffordshire in England, and spent his childhood days nearby in a small coalmining village called Norton Canes in the English 'Black Country'. His first recollection of his father George was in 1918, when George returned from the First World War with serious war wounds, including only one eye. Post war times were hard indeed – Fred had rickets (vitamin D deficiency) and survived pneumonia – but his strong will and sense of purpose was evident from early on, and through his own efforts and hard work, and the encouragement of his mother Alice, he obtained scholarships to attend Queen Mary's Grammar School (1926–1933) in Walsall, Staffordshire, and a State Scholarship to Cambridge University to study Natural Sciences in 1933. It was with some trepidation that he arrived at Jesus College in Cambridge, wearing working boots and with a strong Midlands accent. Nevertheless he flourished both in his studies and in his many other interests – he sang in Jesus College Choir, joined the University Music Society, was a founding member of the University Rambling Club, and secretary of the Botanical Section of the University Natural History Society. He didn't have enough money for the train fare home, so he had to cycle back to the Midlands, and he subsequently cycled all over Britain. Fred graduated in 1937 with a specialisation in Entomology and Experimental Zoology.

Fred's first job (1937 – 1947) was in the Agricultural Advisory Service based in the School of Agriculture in Cambridge. During this era he spent much time working in the Fenlands region of East Anglia advising farmers on how to control damaging agricultural pests and stabilise crop production. Legislation in 1943 enforcing crop rotation in the fenlands ('the Sugar Beet Eelworm Order') was one notable outcome of his work during this period. This early advisory experience gave him a broad background in practical agriculture that benefited him greatly in his later years as a more specialised agricultural scientist. He was in a 'reserved' profession during the Second World War because of the importance of self-sufficiency in food. As an 'Intelligence Officer' in the Home Guard he had many hilarious (and some serious) tales of the second World War years – such as the inadvertent shooting of the Professor of French in the bottom on maneuvers, and looking out of the window in the Zoology Department to see a Messerschmitt warplane strafing Downing Street in Cambridge. In 1940, he married fellow student Margaret Barnes who studied the same courses as he did and also specialised in entomology, and they had four children (Susan, Roger, Michael and Robert).

From 1947 to 1955, Fred was first a Demonstrator then Senior Lecturer in agriculture at Cambridge University, and Director of Studies in agriculture at Jesus College. His lectures covered the full spectrum of agricultural pests, and later these lectures formed the basis of the textbook *Pests of Field Crops* that he authored jointly with Margaret. He built a successful research team in



entomology and Nematology at Cambridge, specialising in later years in Nematology – unsegmented roundworms that attack plant roots. Although beet cyst-nematode became the main focus of his research, other achievements at that time included the discovery and description of the carrot cyst-nematode. In 1948 the family moved to the village of Great Shelford, where Fred ran his two acre garden with agricultural precision, kept honey bees, chickens, ducks and rabbits, and grew more than sufficient vegetables and fruits to feed the family. In 1956 the family moved to Harpenden, Hertfordshire, when Fred was appointed Head of the Nematology Department at Rothamsted Experimental Station, eventually becoming Deputy Director in 1966. He retired officially from Rothamsted in 1979 at age 65, but remained on site until 1987 as an honorary scientist in the Statistics Department. After retiring, Fred maintained his scientific activities, first as editor of *Nematologica*, then as Managing Director and Secretary of the International Trust for Zoological Nomenclature (1980–1987).

The time when Fred was at Rothamsted was the heyday of the Nematology Department. Fred made many valuable contributions to this subject, including the first steps in breeding potatoes resistant to the potato cyst-nematode, proposing a gene-for-gene interaction between cyst nematodes and their hosts, developing an understanding of the soil as an environment for nematodes, and significant contributions to modelling,

population dynamics, population genetics, and other aspects of cyst and other nematodes. Fred was blessed with common sense, clear vision and sense of purpose, and was very practical in all that he did. He always used time efficiently and prided himself on effective chairing of meetings. He also made a point of injecting humour into otherwise dull scientific reports and correspondence, and into his talks and lectures.

In addition to three editions of *Pests of Field Crops*, he wrote over two hundred scientific papers and ran many courses in Plant Nematology locally and overseas. He was also an external examiner for various universities, a Visiting Professor at Imperial College, London University, an editor of various scientific journals and a member of many visiting groups and national committees. He mentored many younger scientists. Fred also travelled widely for work – to north and south America, the Caribbean, Europe, Australia and India. He spent considerable time in India, and ran the first Plant Nematology course there at Aligarh Muslim University and later another at the Indian Agricultural Research Institute in New Delhi. He was the first to discover the potato cyst-nematode in India (in the Nilgiris), which did much to foster the establishment of Plant Nematology in India, and supported training of Indian nematologists.

Fred's work was recognised in many ways – for example by the award of an ScD degree from Cambridge University in 1969, and Honorary Fellowships by the Society of Nematologists, the European Society of Nematologists, the Afro-Asian Society of Nematologists, the Institute of Biology and the Association of Applied Biologists. He was President of the Association of Applied Biologists in 1973-74. Ever the individualist, he declined the OBE offered on his retirement from Rothamsted. Throughout this time Fred maintained his interest in singing, e.g. as a member of the St. Albans

Bach Choir and the Lea Singers, and he was responsible for the annual 'Music for a Summers Evening' held at Rothamsted Manor each year. He also took up skiing as a hobby during his 50's.

After leaving Harpenden in 1987 Fred returned briefly to his roots in the Staffordshire 'Black Country'. Then, in 1991 he moved to Perth in Western Australia, where two of his sons worked. Because of his role in helping to father Nematology in India, in 1992 at the age of 78, he also travelled alone to India as an invited guest to attend the first meeting of the Afro-Asian Society of Nematologists in Aligarh where he was made an honorary fellow of the Society. This was the last major international scientific meeting at which he spoke.

Fred's wife Margaret died suddenly in 1980. Following a second marriage and divorce, he married Marjorie Sutton in Staffordshire, who died of cancer in 1988. After he had moved to Australia he married Enid Moore in 1994 (Fred, Margaret and Enid had been fellow students in their university days). Fred and Enid both continued to pursue scientific and botanical interests - membership of the Royal Society of Western Australia (where they sat in the front row and asked searching questions), Friends of Kings Park and Botanic Gardens, and the local Cambridge Society, and indulged their passion for the unique native flora of Western Australia. Fred also sang in the local church choir. He travelled widely in Australia and went back to Europe several times despite being well into his 80's.

Three years ago Fred was diagnosed with heart disease which slowed him down physically but not mentally: during this time he was greatly supported by Enid, now aged 90. He died on 12th September 2003 in the South Perth Community Hospital in Western Australia. His wife Enid, three sons and a daughter, eight grandchildren, and one great grandchild survive Fred.